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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/664,147	09/17/2003	Jaime Navarrete	2001.45	4161

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EXAMINER

DOVE, TRACY MAE

ART UNIT	PAPER NUMBER
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1745

DATE MAILED: 06/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/664,147

Applicant(s)

NAVARRETE, JAIME

Examiner

Tracy Dove

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 March 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 and 9-14 is/are pending in the application.
- 4a) Of the above claim(s) 10-14 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 and 9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 4/6/05.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____.

DETAILED ACTION

This Office Action is in response to the communication filed on 3/21/05. Applicant's arguments have been considered, but are not persuasive. Claims 1-7 and 9-14 are pending. Claims 10-14 are withdrawn and claim 8 has been canceled. This Action is made FINAL, as necessitated by amendment.

Information Disclosure Statement

The information disclosure statement (IDS) submitted on 4/6/05 has been considered by the examiner.

Claim Objections

Claim 4 is objected to because of the following informalities: the last two lines of claim 4 are identical to the third and fourth lines of claim 4. The last two lines of claim 4 (top of page 3 of the amendment) should be deleted. Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 4 and 9 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The claims recite the "grass lignin being selected from the group consisting of:

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bagasse, straw ...”, which is not supported by the specification as filed. The specification states “grass sources of lignin include, but are not limited to, bagasse, straw ...” at page 6, lines 12-14. These materials are sources of lignin, not the lignin. If the claims are amended to recite “said grass lignin source being selected from...”, such an amendment would be entered after final (if no other substantial claim amendments are made).

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-7 and 9 are rejected under 35 U.S.C. 102(b) as being anticipated by Navarrete et al., WO 02/28955 A2.

Navarrete teaches a lead acid battery separator comprising a microporous membrane including an ultra-high molecular weight polyethylene (UHMWPE), a filler, a processing oil and a lignin (abstract). Grass lignins are disclosed at page 1. The lignin is added to the UHMWPE battery separator to reduce antimony poisoning (top of page 3). The membrane generally comprises about 15-25 wt% UHMWPE, 50-80 wt% filler, 0-25 wt% process oil and 5-20 wt% lignin (top of page 5). The microporous membrane has an average pore size in the range of about 0.1 to about 1.0 micron and a porosity greater than 10% (bottom of page 4). The pore structure is referred to as an open cell structure (top of page 5). The filler may be precipitated silica or oxide compounds (page 5) and the processing oil may be mineral oil, olefinic oil or

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parafinic oil (top of page 6). Grass lignins may be obtained from rice (straw), corn or sugar cane (bagasse) (page 1).

Thus the claims are anticipated.

Response to Arguments

Applicant's arguments filed 3/21/05 have been fully considered but they are not persuasive.

Applicant argues Navarrete does not disclose the use of grass lignins. However, the source used to produce the lignin is considered a product-by-process limitation. Product-by-process limitations, in the absence of unexpected results, are not given patentable weight. Lignin is generally accepted to be a three dimensional, crosslinked polymer comprised of three different phenyl propenol moieties. Applicant must show that the lignin produced from a grass source is structurally different from the lignin of Navarrete. Furthermore, Navarrete teaches the use of lignins in thermoplastics and lignins are added to a lead acid battery separator (4:1st). Navarrete teaches lignins produced from grass sources are known (page 1). Navarrete teaches and suggests lignins for battery separators.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after

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the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tracy Dove whose telephone number is 571-272-1285. The examiner can normally be reached on Monday-Thursday (9:00-7:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Pat Ryan can be reached on 571-272-1292. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


TRACY DOVE
PRIMARY EXAMINER

June 1, 2005